QUICK RELEASE COUPLING

QR-04

MANUAL

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QR-04
1. ADVANTAGES

READY TO RACE

With the success of our QR-03, we are proud to present the new QR04 Steering Wheel Quick Release. When we launched the QR-03, it was designed to withstand the extreme conditions of motorsport. However, as endurance racing and competitive driving have advanced, so have the requirements for our products. The QR-04 takes performance to the next level, offering enhanced durability, precision and reliability to meet the challenges of today's high-intensity racing.

With valuable feedback, improved expertise, and close collaboration with our customers, we have redesigned the system to incorporate key refinements. These enhancements provide increased resistance to vibrations, ensuring effortless removal for easy handling, and guarantying a secure, play-free connection in any car.

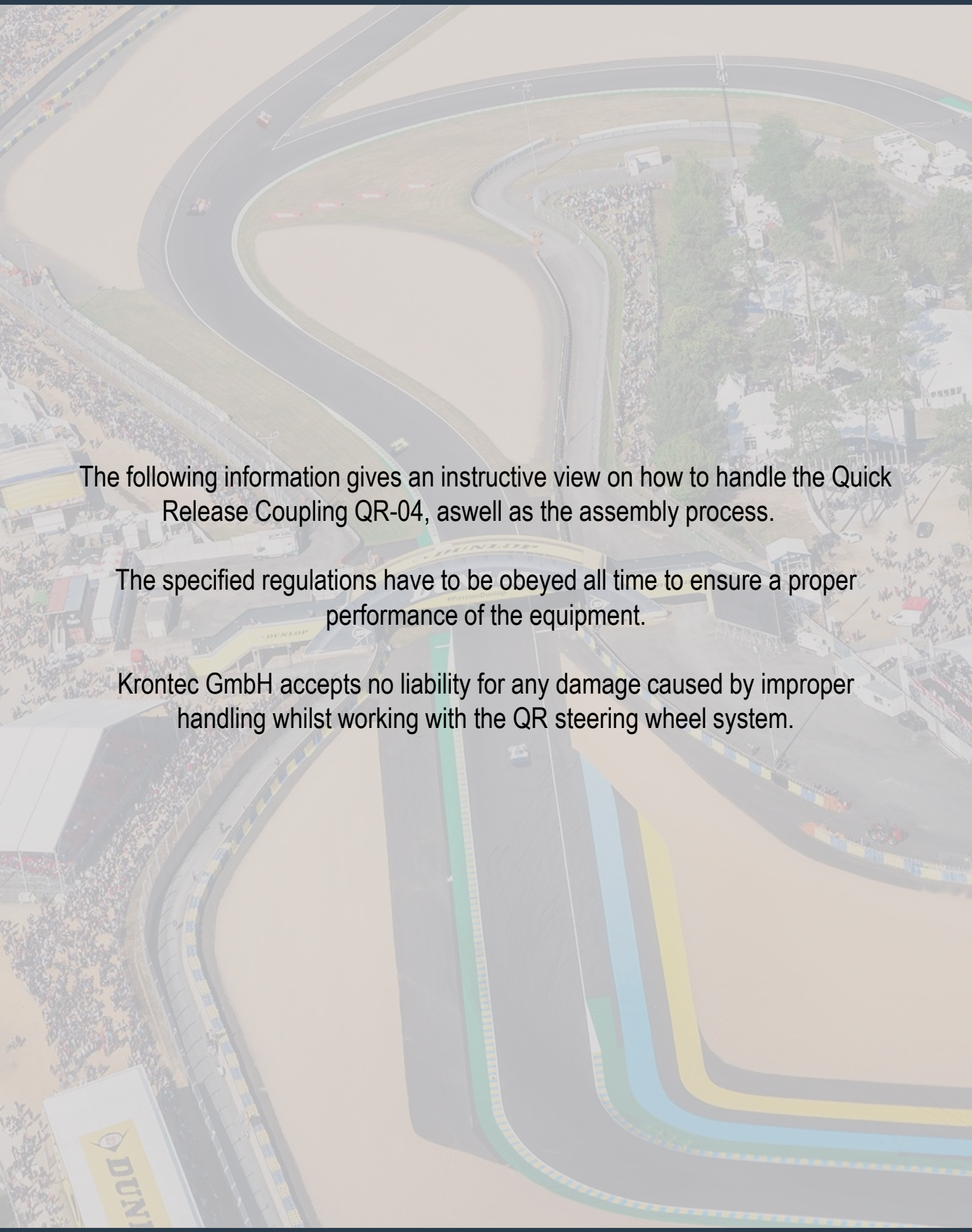
QR-04 Specs:

- Vibration resistant
- Easy handling, Easy Connection, Easy Orientation
- Easy to disconnect with one hand
- Play-free connection at all times
- Protected electrical connectors
- Made from 7075 T7

During the development of the new QR-04, all components underwent rigorous testing to ensure maximum performance and reliability. Detailed results of these tests can be found on the following pages.

The tests include the following:

- Impact Test ---- ✓
- Vice Test ---- ✓
- Torque Test ---- ✓
- Puncture Test ---- ✓
- Pull Test ---- ✓
- Shaker Test ---- ✓



The following information gives an instructive view on how to handle the Quick Release Coupling QR-04, aswell as the assembly process.

The specified regulations have to be obeyed all time to ensure a proper performance of the equipment.

Krontec GmbH accepts no liability for any damage caused by improper handling whilst working with the QR steering wheel system.

FEMALE PART

GRUB SCREW M3
FEMALE CONNECTOR*

FEMALE
CONNECTOR
ST22 PN-MOD

MALE
CONNECTOR
ST22 SN-MOD

GRUB SCREW M3
MALE CONNECTOR*

MALE PART

* Grub screws are provided with the assembly

READY TO RACE

FEMALE MOUNTING OPTIONS

- 6 BOLT PITCH Ø70 (6x60°)
  - THREADED M5 → QR-40*
  - THROUGHHOLE Ø5,5 → QR-42*
- 3 BOLT PITCH Ø50,8 (3x120°)
  - THREADED M5 → QR-44*

DEUTSCH TE 22Pin	QR-42*	QR-44*
SOURIAU 22Pin	QR-46	QR-48

MALE MOUNTING OPTIONS

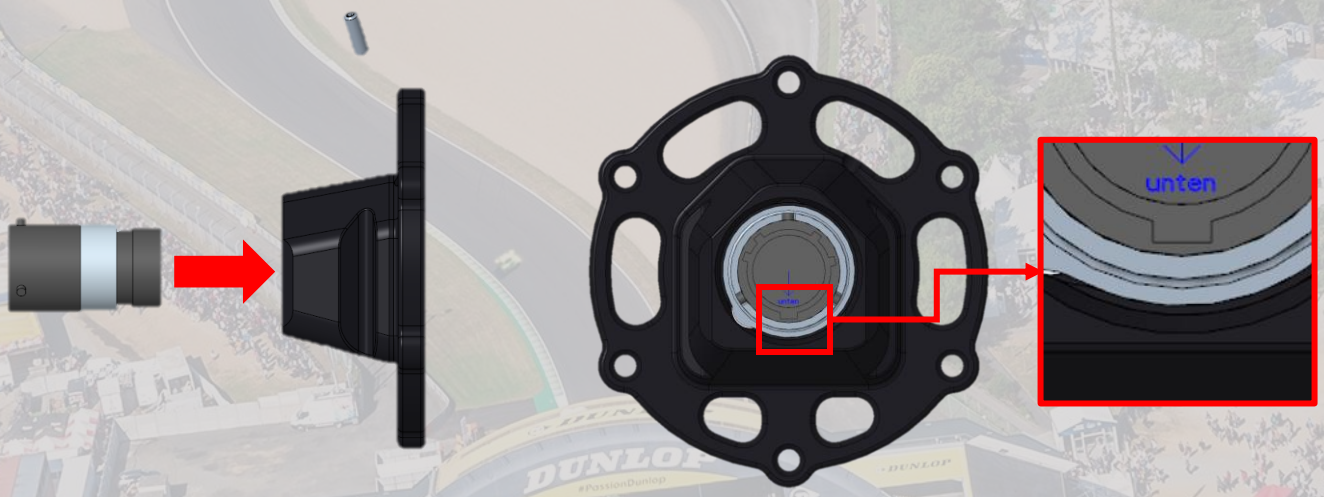
- 6 BOLT PITCH Ø70 (6x60°)
  - THREADED M5 → QR-43*
  - THROUGHHOLE Ø5,5 → QR-49*
- WELDON
  - Diameter On request → QR-41*

DEUTSCH TE 22Pin	QR-49*	QR-41*
SOURIAU 22Pin	QR-45	QR-47

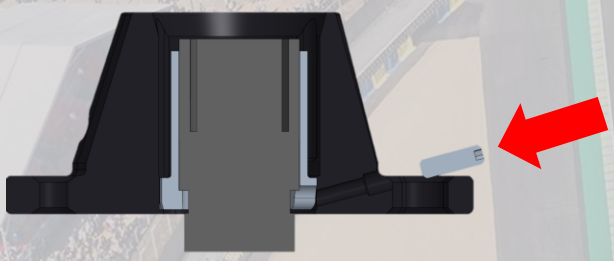
* Add -22P if you want to buy the part incl. DEUTSCH Connector!

1. Make sure you have all the necessary parts listed on the page before ready and clean

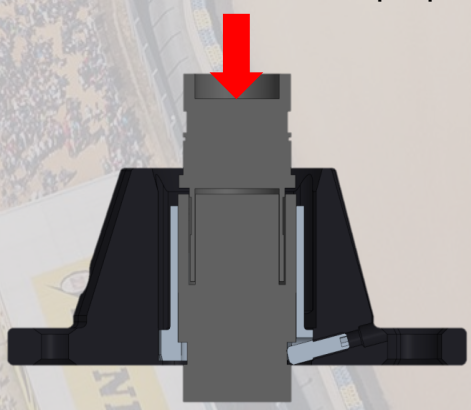
2. Insert the male connector to the male part. Keep an eye on the correct orientation of the connector. The slot of the connector should face to the bottom of the QR as seen below. Also make sure to undo the grub screw if not happened before.



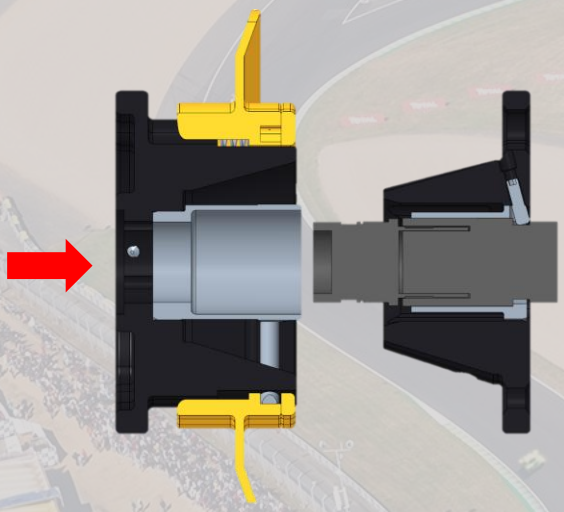
3. Tighten the grub screw carefully to secure the connector



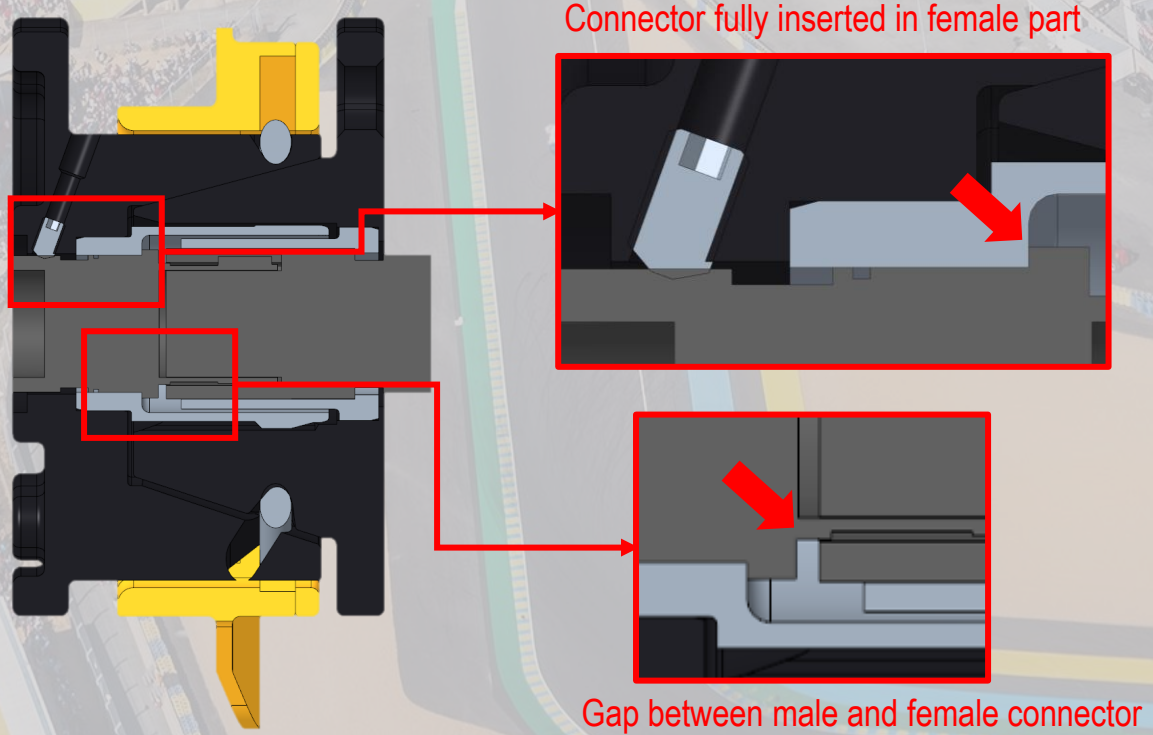
4. Install the female connector onto the already installed male connector. This will ensure the correct and proper orientation of both components



5. Push the female assembly over the before generated sub assembly until male and female part lock together. Again, make sure that the grub screw of the female part is not installed



6. Tighten the grub screw carefully and make sure the connector sits block within the female part. When installed correctly there should be a gap between both connectors male - female. It might help during the connector assembly to use a Ø12x1 o-ring as a spacer between both electrical connectors.



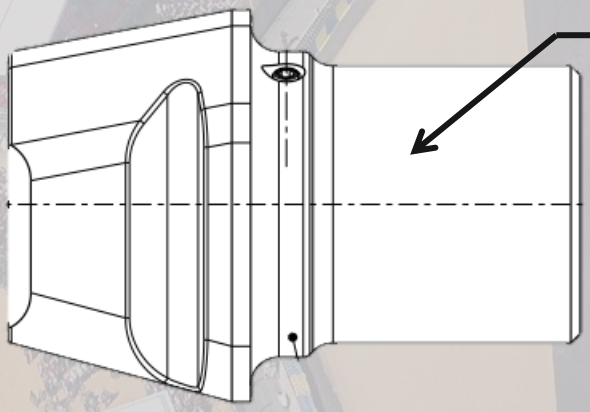
7. The connector assembly is finished!

6. MOUNTING/ WELDING

Only Use Krontec Spacers on the steering wheel side of the QR

Spacers are available with 20mm, 40mm and 60mm

→ Other designs are not recommended and might cause a safety risk



When using weld-on adapters, please make sure that the process will not have any impact on the QR detail.

Therefore please keep an eye on the heat affected zone. Damaging the QR detail and its surface might result in a poor performance of the system.

7. TIGHTENING TORQUE

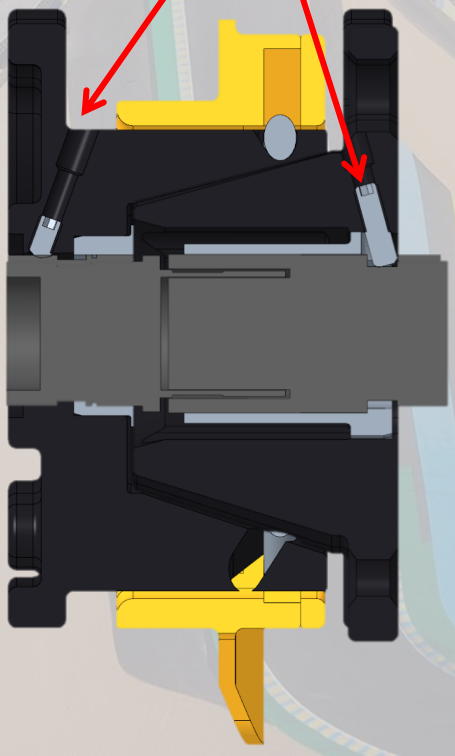
Recommended tightening torque

12x M5 bolts: 4 – 5 Nm

Recommended tightening torque

M3 Grub Screws: 1Nm

You can use a 2nd bolt to secure the first one installed



There are no specific service instructions to follow. The QR-04 should run smoothly and stay free of play at all times.

Just make sure the parts are **CLEAN** and **DRY**.

It is recommended to NOT use any grease on the parts

9. CONNECTOR DATASHEET

Krontec does offer numerous designs including the DEUTSCH 22P Connector as seen below. Please refer to the partnumbers mentioned at point 4 in this document

FEMALE:

QR-40-22P uses QR-03-ST22_PN-Mod = **AS 6 12 – 35 P N**
QR-42-22P uses QR-03-ST22_PN-Mod = **AS 6 12 – 35 P N**
QR-44-22P uses QR-03-ST22_PN-Mod = **AS 6 12 – 35 P N**

MALE:

QR-41-22P uses QR-03-ST22_SN-Mod = **AS 1 12 – 35 S N**
QR-43-22P uses QR-03-ST22_SN-Mod = **AS 1 12 – 35 S N**
QR-49-22P uses QR-03-ST22_SN-Mod = **AS 1 12 – 35 S N**

You will find the Datasheet by clicking the link below. Refer to pages 21-23.

TE DEUTSCH CONNECTOR DATASHEET
TECHNICAL MANUAL DEUTSCH

If you want to opt for one of the Souriau components you will need to use the following connectors. Note that Krontec ist not able to deliver the parts including the electrical components

FEMALE:

QR-46 = **8sta6-1235pn518**
QR-48 = **8sta6-1235pn518**

MALE:

QR-45 = **8sta0-1235sn518**
QR-47 = **8sta0-1235sn518**

INTERESTED?
LETS GET IN TOUCH

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Please also make sure to scan the QR Code below to get access to further infos about the QR-04 including customer drawings and models